

INSTRUCTION MANUAL (DETAILED VERSION)

SWITCH CONTROL UNIT FSC-110



DAIICHI ELECTRONICS CO., LTD.

Contents

Safety precautions	2
Composition of type	2
1 Product outline	3
2 Name and function of each part	3
3 Included items	4
4 Dimension diagram	4
5 Installation instructions	4
6 Connection	5
7 Operation	5
8 Control / Monitoring mode	6
8.1 Display (LED)	6
8.2 ON/OFF control	7
8.3 Annunciator sequence	10
9 Setting mode	12
9.1 Setting flow	12
9.2 Setting method	12
9.3 Setting menu	13
10 Test mode	15
10.1 Test flow	15
10.2 Test method	15
11 Specification	16
11.1 Rating	16
11.2 Detailed specifications	16
12 Trouble shooting	18

Thank you for purchasing DAIICHI ELECTRONICS product.
Please read this instruction manual carefully before using.

Safety precautions

■ Environment conditions

Please be sure to use this product in a place that meets the following conditions.

In places that do not meet this condition, it may cause malfunction or failure and product life decline.

- Within the range of ambient temperature -10 to +55 °C, humidity 5 to 90% RH.
- Place free of dust, corrosive gas, salt and oily smoke. (Corrosive gas: SO₂/H₂S, etc.)
- Location that is not affected by vibration and shock.
- Location that is not affected by external noise.
- Altitude 2000m or less.

■ Outdoor use conditions

- These products are not a dustproof, waterproof, and splash proof construction. Please avoid the place with much dust. Moreover, please install in the place not exposed to rain or water drop.
- Please do not install in the place where sunlight hits directly. Discoloration and degradation of a name plate, and deformation of the case by the surface temperature rise may occur.

■ Mounting and wiring

Please refer to this instruction manual for mounting and the wiring.

 CAUTION	● Please refer to connection diagram for the wiring. ● Please avoid hot line work. ● Please use an electrical wire size suitable with the rated current. ● Please check the tightening of the screw.
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■ Preparation

This product must be set before use. Please set correctly after reading this instruction manual.

■ Maintenance and inspection

- Inspection in energized state is dangerous.
- No replacement in periodic inspection.
- After wiring change and maintenance, attach the terminal cover.
- Please wipe off lightly with the dry soft cloth. Please do not use the organic solvent, chemicals, cleaners, etc., such as an alcohol, for cleaning.

■ Storage

Please store in a place that meets the following conditions.

- The ambient temperature within -25 to +70 °C (storage temperature).
- Daily average temperature 40 °C or less.
- Location corresponding to the usage environment and use conditions.
- Aluminum electrolytic capacitors are used in products. Please energize the power supply within one year after purchase.

■ Countermeasures against troubles

If trouble occurs within the warranty period, DAIICHI ELECTRONICS will repairs this product.

■ Disposal

Please dispose this product as industrial waste (non-combustible).

Mercury parts and a nickel-cadmium battery are not used for this product.

■ Product replacement cycle

The recommended replacement period for this product is 10 years.

■ Warranty period

The warranty period of the product is one year after the date of delivery.

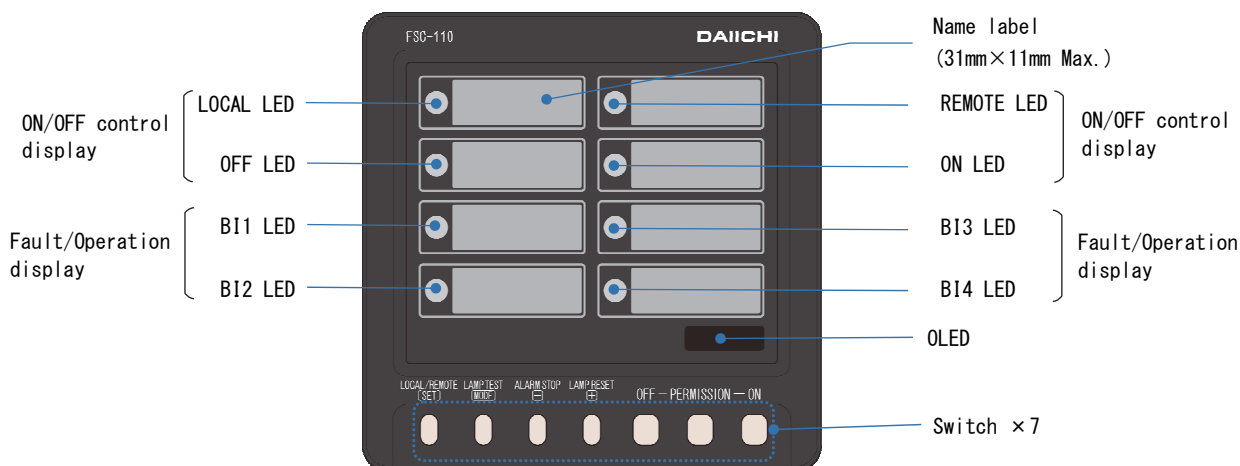
Composition of type

Type	Specification code	
FSC-110-	① Power supply	
	1	100/110V AC
	2	100/110V DC
	② Communication output	
	1	CC-Link

1 Product outline

- The ON / OFF control of the switchgear can be performed local (front switch) or remote (CC-Link communication).
- Displays ON / OFF control of switchgear, control status (Local / Remote) and fault / operation due to BI1 to BI4.
- The interlock function enables ON / OFF control during operation lock input and ON control lock during a warnig.
- BI ON / OFF (LED, communication output) can be checked without adding input.
- The guidance display by OLED makes setting easy.

2 Name and function of each part

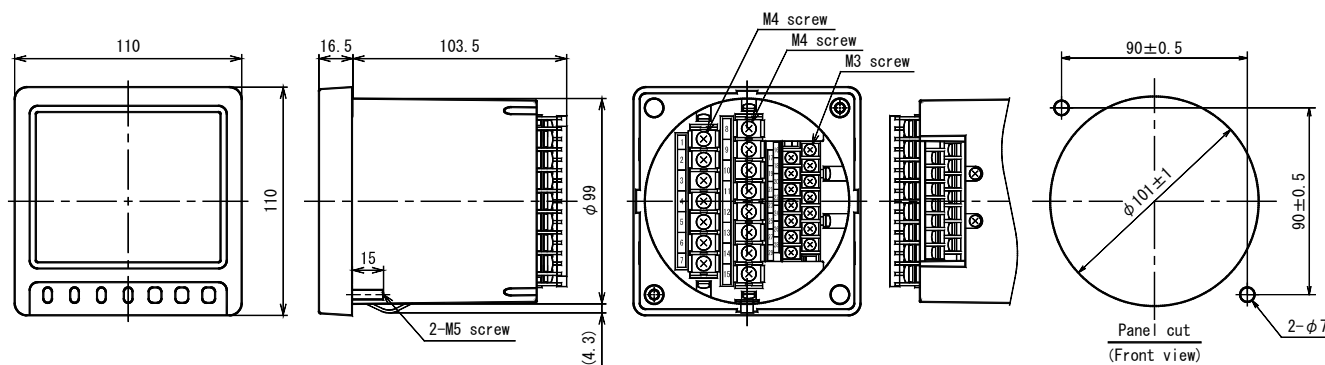


Name	Function		Description page
LED	LOCAL, REMOTE	Displays the control status of the switchgear (Local / Remote). LED color : Amber	P6 to P15
	ON, OFF	The status of the switchgear is lit by the answer signal. LED color ON : Red, OFF : Green	
	BI1 to BI4	When fault / operation input (BI1 to BI4) is applied, it flashes or lights. Warning : Red, Caution : Amber, Operation : White / Green / Blue / Red (Inputs can be set individually)	
Name label	Paste the name label of the fault or operation corresponding to each input. (Name label need to be prepared by the user.)		—
OLED	Provides guidance on configuration and testing.		P6 to P15
ON	Used for "ON" control of switchgear. When pressed for 0.2 seconds or longer, "ON LED" flashes and waits for ON control permission.		P7 to P9
OFF	Used for "OFF" control of switchgear. When pressed for 0.2 seconds or longer, "OFF LED" flashes and waits for OFF control permission.		P7 to P9
PERMISSION	Used for "ON" or "OFF" control of switchgear. Pressing for 0.2 seconds or more in each control permission wait state operations the corresponding control output.		P7 to P9
LAMP RESET +	Control / Monitoring mode	Resets fault indication (LED).	P10 to P14
	Setting mode / Test mode	Using for change setting values and selecting items / elements.	
ALARM STOP -	Control / Monitoring mode	Change the failure indicator LED from blinking to lit.	P10 to P14
	Setting mode / Test mode	Used for change setting values and selecting items / elements.	
LAMP TEST MODE	Control / Monitoring mode	Used to check the lighting of the LED. Press the [SET] and [MODE] switches simultaneously for 3 seconds or longer to enter test mode.	P10 to P14
	Setting mode / Test mode	Used to return to the control / monitoring mode or return to the previous screen.	
LOCAL/REMOTE [SET]	Control / Monitoring mode	Used for LOCAL / REMOTE switching with ON / OFF control. Press [SET] for more than 3 seconds to switch to setting mode. Press the [SET] and [MODE] switches simultaneously for 3 seconds or longer to enter test mode.	P10 to P14
	Setting mode / Test mode	Used for definite the setting values.	

3 Included items

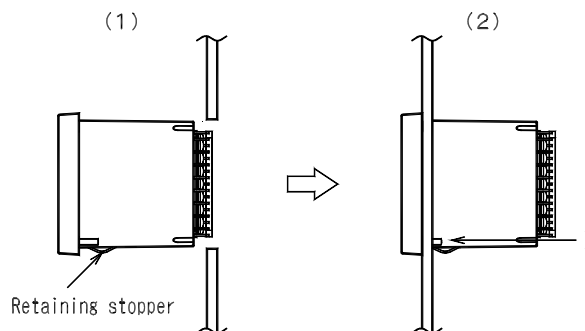
- ① Instruction Manual (Installation and Operation) 1 pc
- ② M5 flange nut (for mounting) 2 pcs

4 Dimension diagram



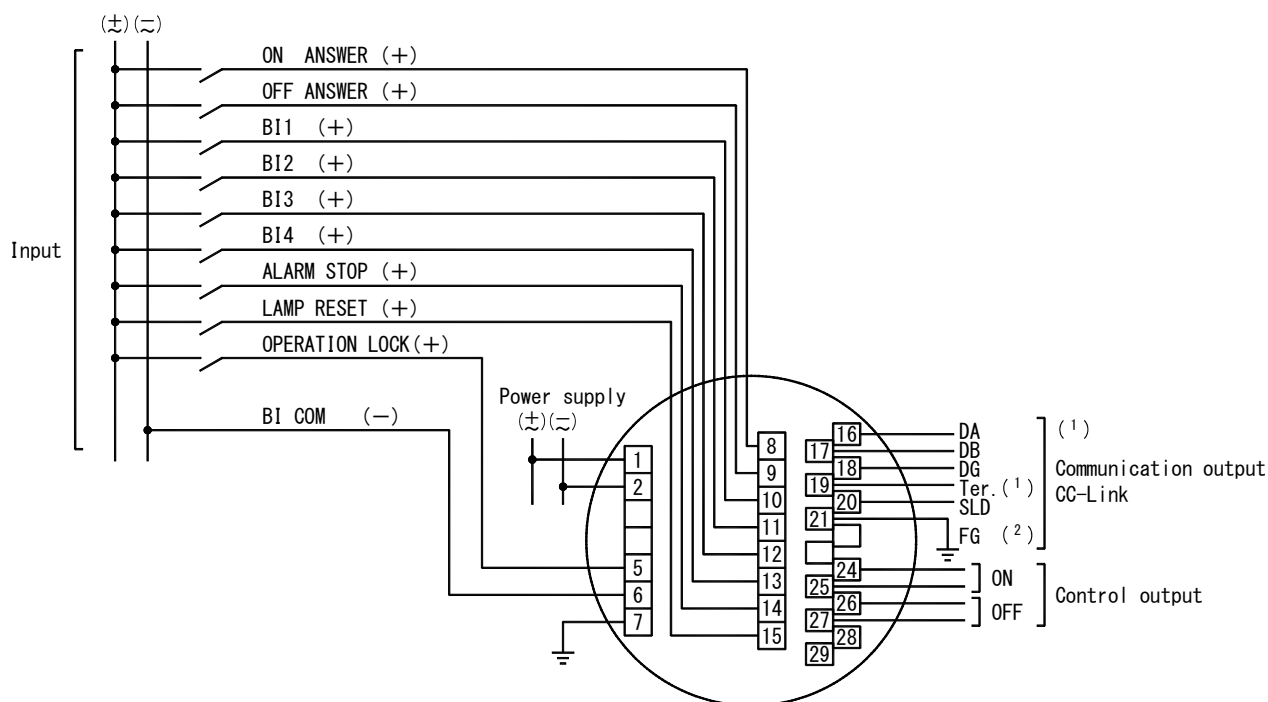
5 Installation instructions

- (1) Unit is put in a cut hole of a panel from the front.
Its body is inserted until it exceeds retaining stopper of the lower base.
- (2) Please fix the unit in place with attached M5 flange nut with tightening torque of 2.0 to 2.5N·m.



6 Connection

Remove the terminal cover and connect correctly according to the connection diagram.
After wiring, attach the terminal cover.



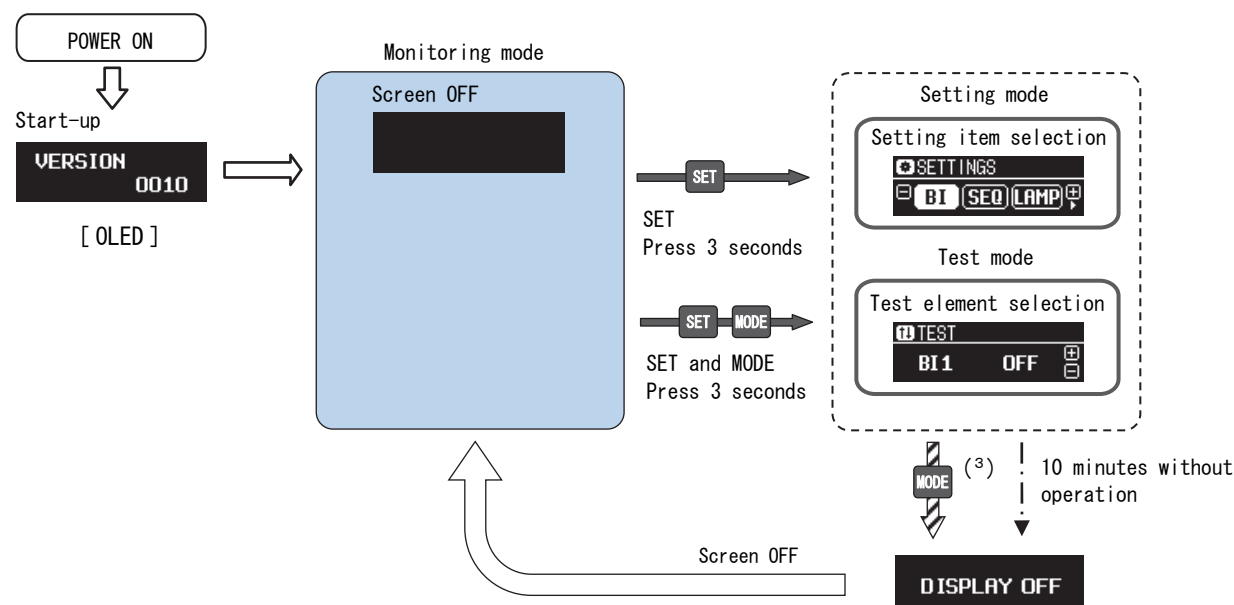
Note(1) By shorting number 17 (DB) and number 19 (Ter.), termination resistor of 110Ω is internally connected. Please use it only for the equipment which becomes terminated in connection form.

Note(2) FG is equivalent to functional ground, so dedicated ground or common ground is recommended. SLD and FG are connected internally.

7 Operation

This product can switch to each mode (Control/Monitoring mode, Setting mode, Test mode) by switch operation. You can also operate while checking the OLED display.

For the operation method in each mode, please refer to section 8 to 10.

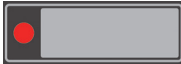


Note(3) From any screen, press **MODE** for 3 seconds or more to return to monitoring mode.

8 Control / Monitoring mode

8.1 Display (LED)

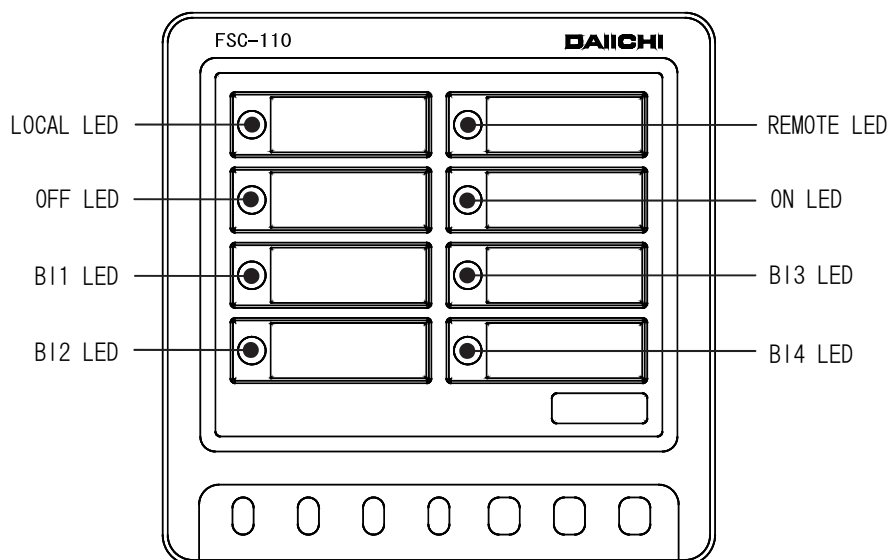
Each LED (LOCAL, REMOTE, OFF, ON) is displayed according to the LOCAL control or REMOTE control timing chart in section 8.2 ON / OFF control. The lighting color of the LED is as follows.

Display	Operation mode setting		
	LOCAL, REMOTE	OFF	ON
LED lighting color	Amber 	Green 	Red 

B11 to B14 LEDs display according in section 8.3 Annunciator sequence.
The lighting color of the LED is as follows.

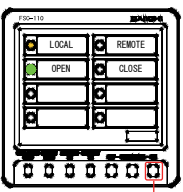
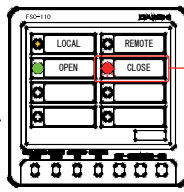
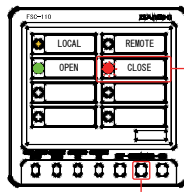
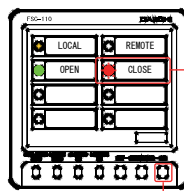
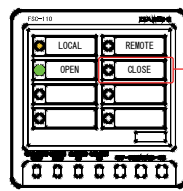
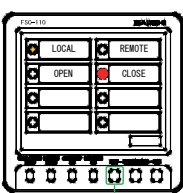
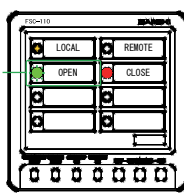
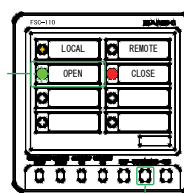
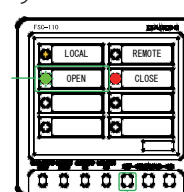
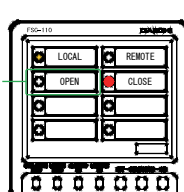
Display	Operation mode setting		
	Warning	Caution	Operation ⁽⁴⁾
LED lighting color	Red 	Amber 	White 
			Green 
			Blue 
			Red 

Note⁽⁴⁾ The lighting color of the LED can be set individually for each input.



8.2 ON/OFF control

(1) LOCAL control

Control ⁽⁵⁾	Control method
ON control	① When ON is pressed for 0.2 seconds or longer, the “ON LED” flashes and waits for ON control permission. ⁽⁶⁾ (While the “ON LED” is flashing, if you press ON again or do not operate for 10 seconds, the waiting for ON control permission is canceled.) ② ON control (control output) operates when PERMISSION is pressed for 0.2 seconds or more while waiting for ON control permission. ⁽¹⁰⁾ ③ When the ON answer input is applied and the “ON LED” lights up, the “ON” control is completed. ①  Press ON ⁽⁶⁾ ⁽⁷⁾ ②  ON LED flashes ON control operation. (Valid after 0.5 seconds after ON operation) ③  ON LED lights ON control complete Cancel operation. (Valid after 1 second after ON operation)  ON LED flashes Press ON ⁽⁶⁾ ⁽⁷⁾  ON LED off (Cancel)
OFF control	① When OFF is pressed for 0.2 seconds or longer, the “OFF LED” flashes and waits for OFF control permission. ⁽⁶⁾ (While the “ON LED” is flashing, if you press OFF again or do not operate for 10 seconds, the waiting for OFF control permission is canceled.) ② OFF control (control output) operates when PERMISSION is pressed for 0.2 seconds or more while waiting for OFF control permission. ⁽¹⁰⁾ ③ When the OFF answer input is applied and the “OFF LED” lights up, the “OFF” control is completed. ①  OFF LED flashes Press OFF ⁽⁸⁾ ⁽⁹⁾ ②  OFF LED flashes OFF control operation. (Valid after 0.5 seconds after OFF operation) ③  OFF LED lights OFF control complete Cancel operation. (Valid after 1 second after OFF operation)  OFF LED flashes Press OFF ⁽⁸⁾ ⁽⁹⁾  OFF LED off (Cancel)

Note ⁽⁵⁾ Operation is valid even in setting mode and test mode.

Note ⁽⁶⁾ When the ON LED is lights, the OFF LED is flaching, the warning has occurred, or the operation lock, the ON control operation is invalid.

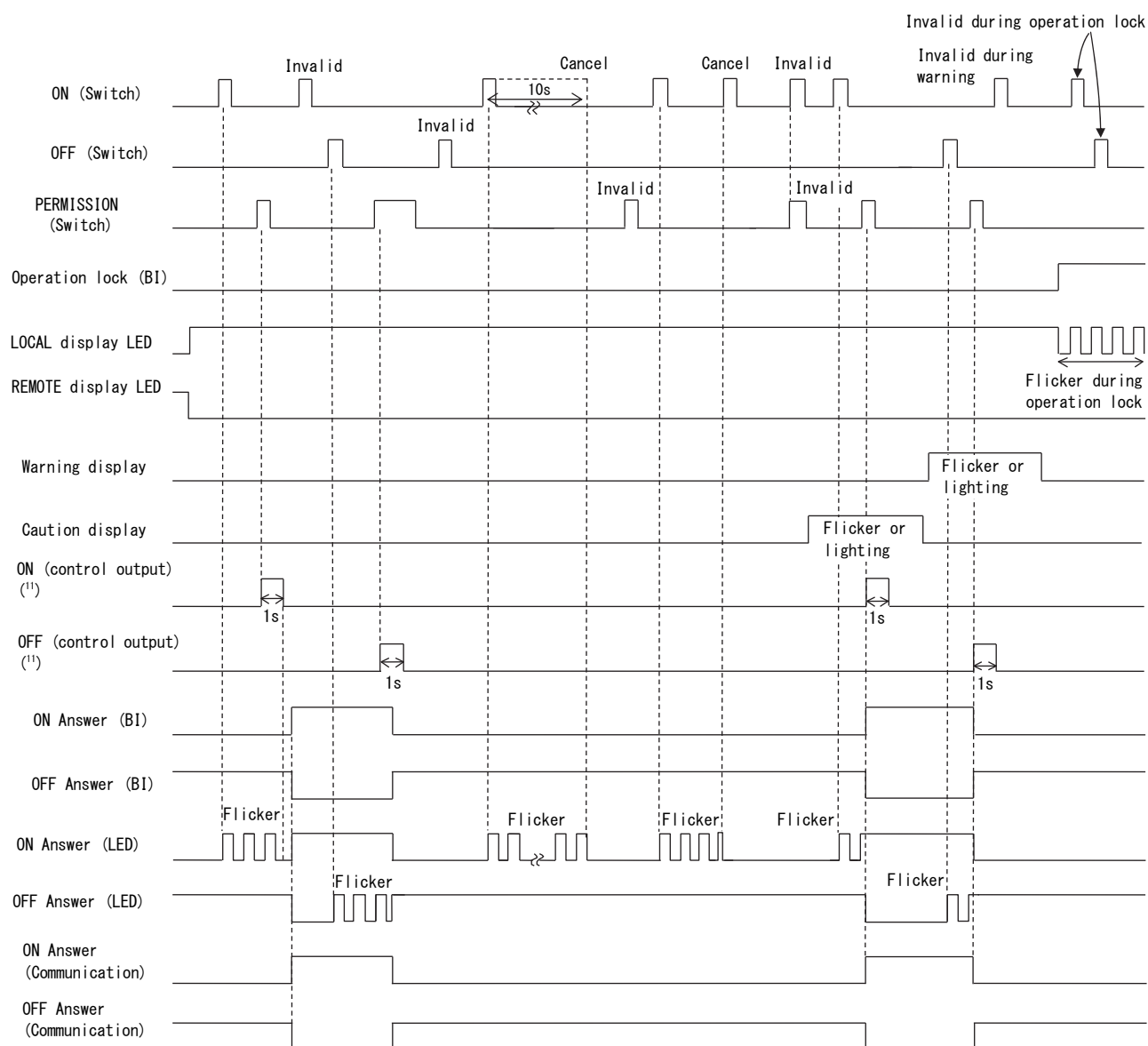
Note ⁽⁷⁾ If **ON** and **PERMISSION** are pressed at the same time, the operation is invalid.

Note ⁽⁸⁾ When the OFF LED is lights, the ON LED is flaching, the operation lock, the OFF control operation is invalid.

Note ⁽⁹⁾ If **OFF** and **PERMISSION** are pressed at the same time, the operation is invalid.

Note ⁽¹⁰⁾ ON ontrol (control output) or OFF control (control output) is output for 1 second after control operation.

■ LOCAL control timing chart



Note (1) Operating condition of control output

Equipment status		Control output	
Operation lock	Warning indicate	ON control	OFF control
None	OFF	Allow	Allow
	Flicker / Lighting	Disallow	Allow
Lock	OFF	Disallow	Disallow
	Flicker / Lighting	Disallow	Disallow

(2) REMOTE control (CC-Link communication)

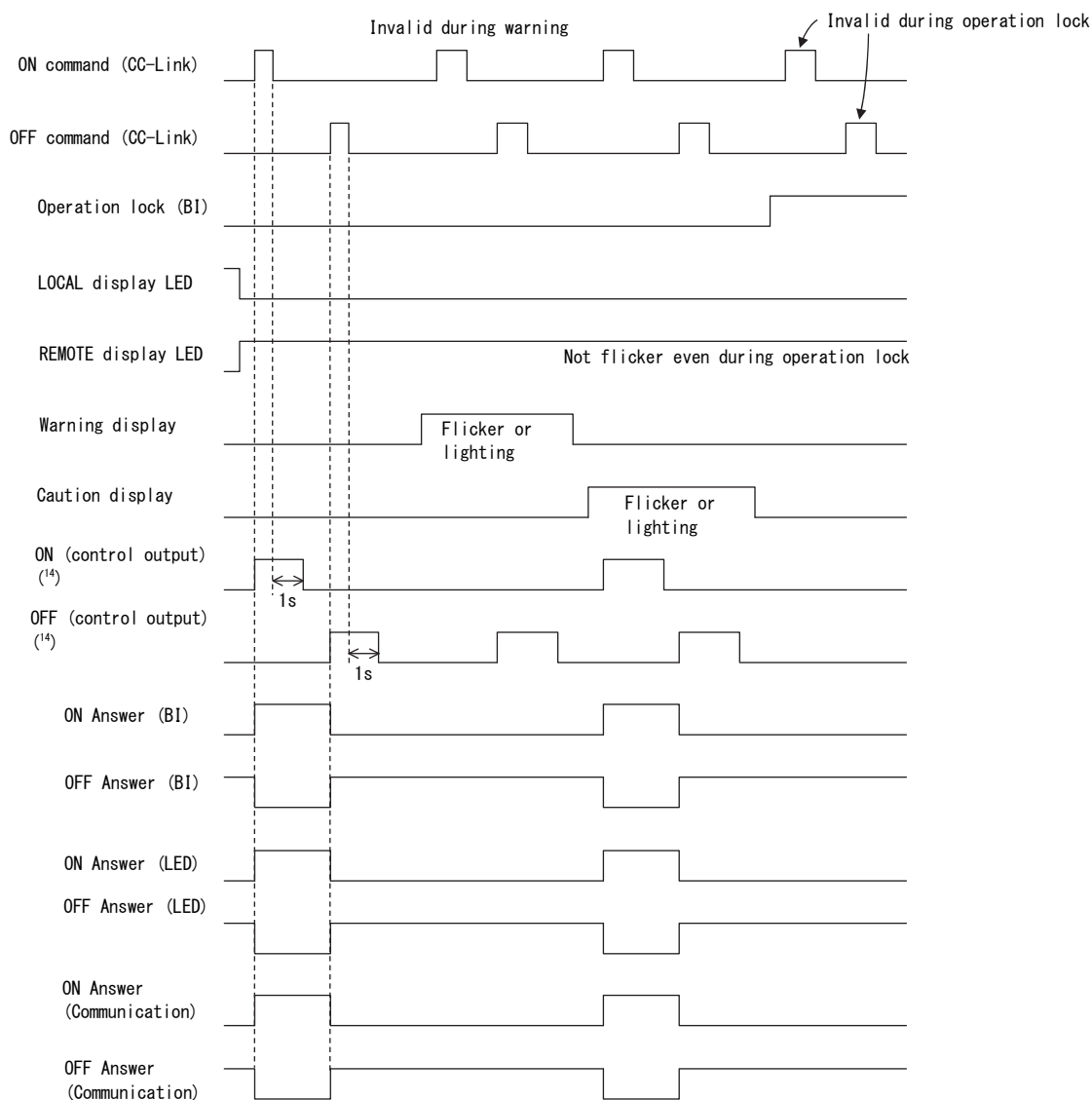
Operates according to the REMOTE timing chart.

Control	Control method
ON control	When an ON command (0E37H) is sent via CC-Link communication, ON (control output) is activated. ⁽¹²⁾ (For details, refer to the FSC-110 communication specification CC-Link protocol.)
OFF control	When an OFF command (0EC8H) is sent via CC-Link communication, OFF (control output) is activated. ⁽¹³⁾ (For details, refer to the FSC-110 communication specification CC-Link protocol.)

Note ⁽¹²⁾ Operation is invalid during in warning or while the operation is locked.

Note ⁽¹³⁾ Operations are disabled while the operation is locked.。

■ REMOTE control timing chart



Note ⁽¹⁴⁾ Operating condition of control output

Equipment status		Control output	
Operation lock	Warning indicate	ON control	OFF control
None	OFF	Allow	Allow
	Flicker / Lighting	Disallow	Allow
Lock	OFF	Disallow	Disallow
	Flicker / Lighting	Disallow	Disallow

8.3 Annunciator sequence

Operates according to the annunciator sequence.

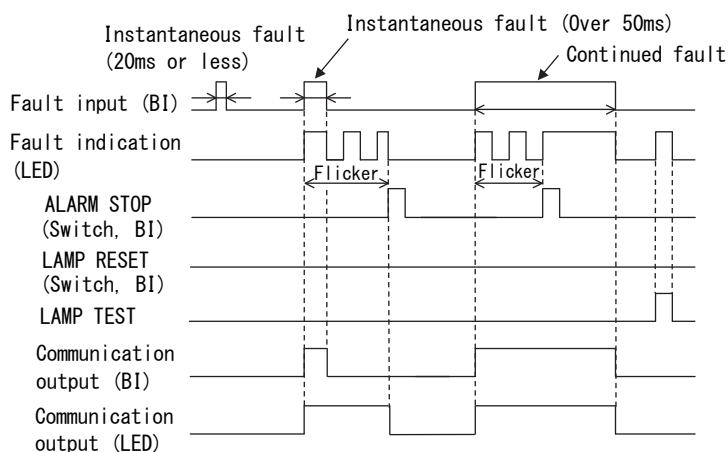
Operation ⁽¹⁵⁾		Operation mode setting		
		Warning	Caution	Operation
LAMP TEST	Switch	All LEDs light up while the switch is pressed, regardless of the input status.		
ALARM STOP	Switch	Stop the alarm state. LED : Flicker stop		Unused
	External operation input			
LAMP RESET	Switch	Resets (turns off) the fault indication (LED) during the manual recovery sequence.		Unused
	External operation input			

Note ⁽¹⁵⁾ The sequence operation is maintained internally even during the setting mode.
Also, the switch operation is invalid, but the external operation input is valid.

(1) Operation Mode : Warning, Caution

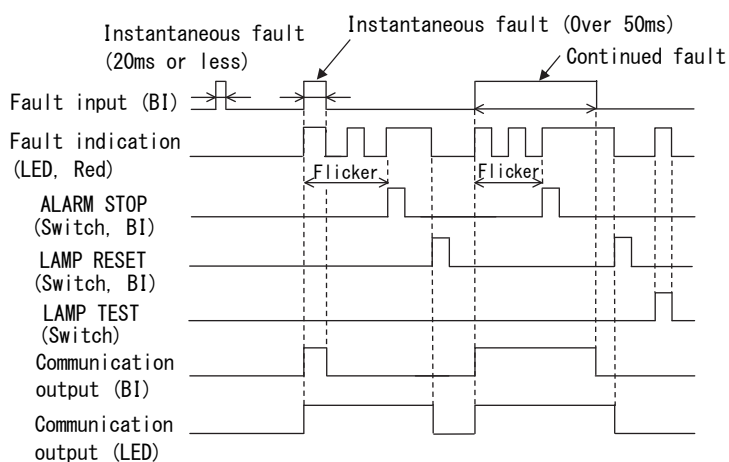
■ Automatic reset

Fault input recovers after "ALARM STOP" operation. The display also returns automatically.

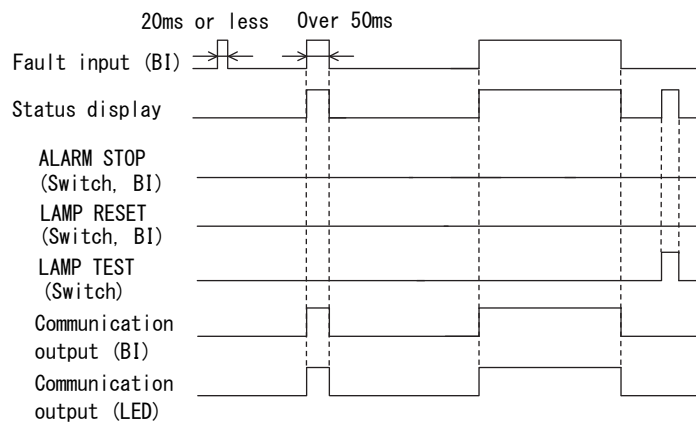


■ Manual reset

After recovery from the fault input, the indication recovers by the "LAMP RESET" operation.



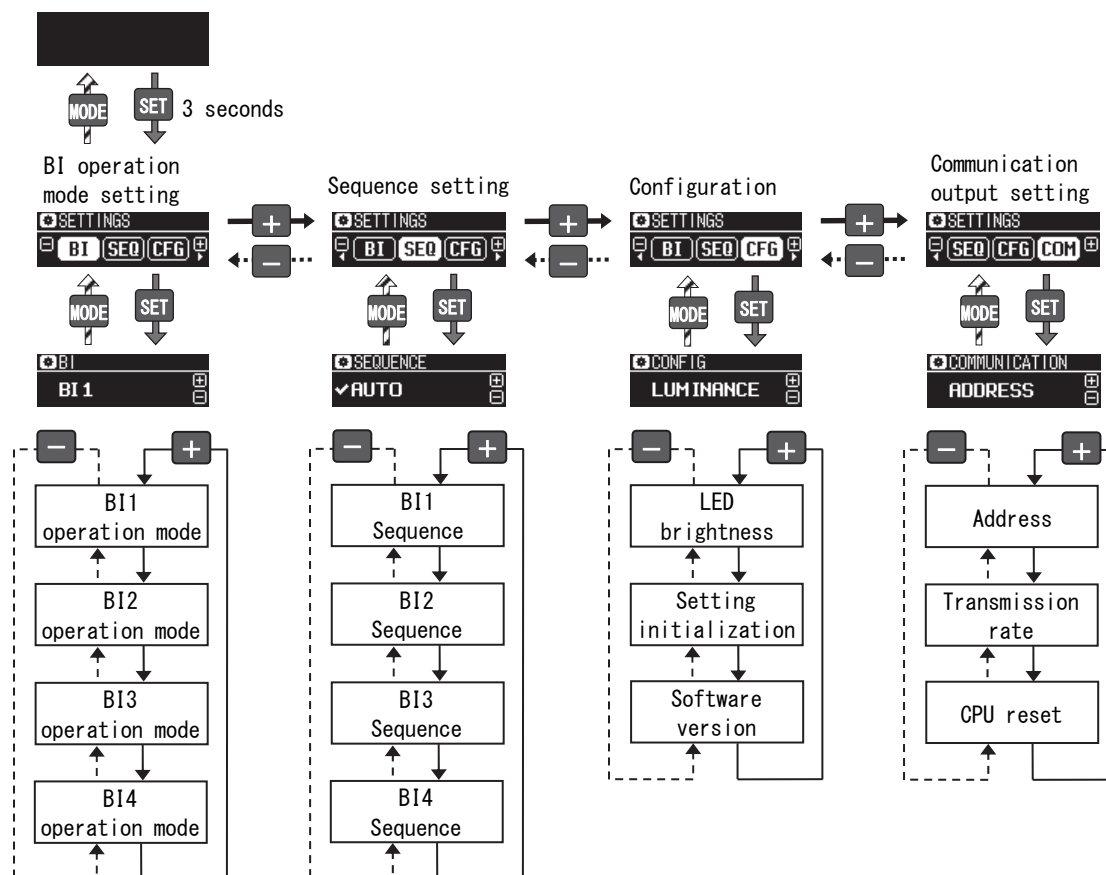
(2) Operation mode : Operation



9 Setting mode

9.1 Setting flowchart

Control • Monitoring mode



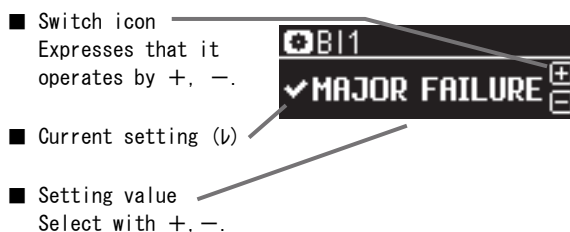
9.2 Setting method

(1) Display

Example : BI element selection



Example : BI1 operation mode setting



(2) Operation

● Setting item / element selection display

- ① Select the setting item / element with **+** **-**. Confirm with **SET**.
- ② When confirmed, it will shift to the setting display of the selected item / element.

● Setting screen

- ① Select the setting value with **+** **-**. Confirm with **SET**.
- ② Once confirmed, the “mark (✓)” indicating the current set value will be displayed to the left of the changed set value.
- ③ When there are many setting values (address of communication output), press **+** **-** for a longer time to change at high speed.

9.3 Setting menu

(1) BI operation mode setting BI

Thick frame : Initial setting value

Item	Setting description	Setting content													
BI operation mode [BI1 to BI4]	Set the operation mode of fault / operation input (BI1 to BI4).	【Element】 BI1 DE SET 【Operation mode】 BI1 DE The corresponding LED lights up during setting.													
	Set the lighting color for the operation indication. Lighting color for warning and caution cannot be set.	<Note> "Operation" (Lighting color : Red) has the same lighting color as "Warning". Please check the application before setting. <table><tr><th colspan="2">Setting range ⁽¹⁷⁾</th></tr><tr><td>WARNING ⁽¹⁶⁾</td><td>Red</td></tr><tr><td>CAUTION ⁽¹⁶⁾</td><td>Amber</td></tr><tr><td>OPERATION (WHITE)</td><td>White</td></tr><tr><td>OPERATION (GREEN)</td><td>Green</td></tr><tr><td>OPERATION (BLUE)</td><td>Blue</td></tr><tr><td>OPERATION (RED)</td><td>Red</td></tr></table>	Setting range ⁽¹⁷⁾		WARNING ⁽¹⁶⁾	Red	CAUTION ⁽¹⁶⁾	Amber	OPERATION (WHITE)	White	OPERATION (GREEN)	Green	OPERATION (BLUE)	Blue	OPERATION (RED)
Setting range ⁽¹⁷⁾															
WARNING ⁽¹⁶⁾	Red														
CAUTION ⁽¹⁶⁾	Amber														
OPERATION (WHITE)	White														
OPERATION (GREEN)	Green														
OPERATION (BLUE)	Blue														
OPERATION (RED)	Red														

Note⁽¹⁶⁾ Initial setting value. BI1, BI2 : WARNING, BI3, BI4 : CAUTION

Note⁽¹⁷⁾ Unit display is indicated as below.

WARNING : MAJOR FAILURE

CAUTION : MINOR FAILURE

OPERATION : STATUS

(2) Sequence setting SEQ

Thick frame : Initial setting value

Item	Setting description	Setting content							
Sequence [SEQUENCE]	Set the sequence operation of the annunciator.	【Sequence】 	<table><tr><th colspan="2">Setting range</th></tr><tr><td>Automatic reset</td><td>AUTO</td></tr><tr><td>Manual reset</td><td>MANUAL</td></tr></table>	Setting range		Automatic reset	AUTO	Manual reset	MANUAL
		Setting range							
Automatic reset	AUTO								
Manual reset	MANUAL								
		This applies to inputs whose operation mode is set to warning or caution. Also, it does not affect the operation indication.							

(3) Configuration setting CFG

Thick frame : Initial setting value

Item	Setting description	Setting content												
LED brightness [LUMINANCE]	Set the brightness of the LED.	【Item】 CONFIG LUMINANCE → SET → 【Element】 CFG > LUMINANCE RED → SET → 【Brightness】 CFG > LUM > RED ✓ 3 Brightness can be set for each lighting color. <table><thead><tr><th>Setting element</th></tr></thead><tbody><tr><td>RED</td></tr><tr><td>AMBER</td></tr><tr><td>WHITE</td></tr><tr><td>GREEN</td></tr><tr><td>BLUE</td></tr></tbody></table> → <table><thead><tr><th>Setting range</th></tr><tbody><tr><td>5</td></tr><tr><td>4</td></tr><tr><td>3</td></tr><tr><td>2</td></tr><tr><td>1</td></tr></tbody></thead></table> Bright ↑ ↓ Dark	Setting element	RED	AMBER	WHITE	GREEN	BLUE	Setting range	5	4	3	2	1
Setting element														
RED														
AMBER														
WHITE														
GREEN														
BLUE														
Setting range														
5														
4														
3														
2														
1														
Set value initialization [DEFAULT]	All set values can be initialized.	【Item】 CONFIG DEFAULT → SET → 【Initialization】 CFG > DEFAULT SETTINGS → SET → 【After initialization】 CFG > DEFAULT ✓ SETTINGS 3 seconds Press SET for 3 seconds to initialize all settings. When initialization is complete, the “L” mark appears on the left.												
Software version [SOFTWARE]	Display the software version.	【Item】 CONFIG SOFTWARE → SET → 【Version】 CFG > SOFTWARE VERSION 0010 Version : 4-digit alphanumeric												

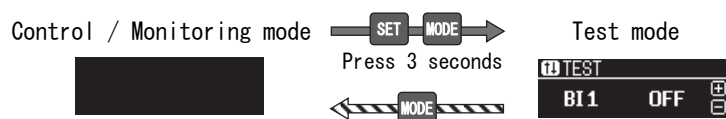
(4) Communication output setting COM

Thick frame : Initial setting value

Item	Setting description	Setting content	
Address [ADDRESS]	Set the communication address.	【Item】 COMMUNICATION ADDRESS SET MODE	【Address】 COM > ADDRESS 1 Setting range 1 ... 64
Transmission rate [BIT RATE]	Set the transmission speed of communication.	【Item】 COMMUNICATION BIT RATE SET MODE	【Transmission rate】 COM > BIT RATE 156 kbps Setting range 156kbps 625kbps 2.5Mbps 5Mbps 10Mbps
CPU reset [CPU RESET]	The equipment can be reset while power supply is applied, such as during recovery from the communication stop state.	【Item】 COMMUNICATION CPU RESET SET MODE	【Reset】 COM > CPU RESET RESET 5s Press [SET] for 5 seconds to reset the device. (Will be in monitoring mode after reset)

10 Test mode

10.1 Test flow



<Note> When in test mode, the fault / operation input becomes invalid and all sequence operations are cleared.

10.2 Test method

The sequence operation can be checked without applying input to the fault / operation input (BI1 to BI4).

Test item	Test content
Test	- Select the fault / operation input (BI1 to BI4) to be tested with + or -. - Press SET to ON the selected BI, and press SET again to OFF the BI. Test sequence diagram: TEST BI1 OFF → SET → TEST BI1 ON → SET → TEST BI1 OFF

11 Specification

11.1 Rating

Item		Specification
Input		Operation lock : 1 point, ON answer : 1 point, OFF answer : 1 point, Fault / operation input (BI) : 4 points, ALARM STOP : 1 point, LAMP RESET : 1 point Input pulse width : More than 50ms (No input for 20 ms or less) Negative common
Input range and input current		(1) 85 to 127V AC Approx. 5mA (110V AC) (Rated voltage 100/110V AC) (2) 80 to 143V DC Approx. 5mA (110V DC) (Rated voltage 100/110V DC)
Power supply	Power supply range and consumption VA	(1) 85 to 127V AC 4.5VA (Rated voltage 100/110V AC) (2) 80 to 143V DC 3 W (Rated voltage 100/110V DC)
	Inrush current (Time constant)	Rated voltage 110V AC Less than 1.1A (Approx. 14ms) Rated voltage 110V DC Less than 0.8A (Approx. 14ms)

11.2 Detailed specifications

Item		Specification
Display	LED	LOCAL/REMOTE : Amber, OFF : Green, ON : Red Total 4 points, Fixed value Warning : Red, Caution : Amber, Operation : White, Green, Blue, Red Total 4 points, Can be set for each input.
	OLED	Display guidance on settings and tests.
Control output	Contact configuration	ON, OFF Normally-open contact (a contact) 2 points
	Contact capacity	125V AC 8A, 125V DC 0.3A (Resistance load) 125V AC 5A, 125V DC 0.1A (Inductive load)
	Response time	Less than 10ms
Communication output	Protocol	CC-Link Ver. 1.10
	Transmission method	Broadcast polling method
	Synchronous method	Frame synchronization method
	Transmission rate	156kbps / 625kbps / 2.5Mbps / 5Mbps / 10Mbps
	Encoding method	NRZI
	Transmission path format	Bus format (compliance standards, TIA-485-A)
	Transmission format	HDLC compliant
	Error control method	CRC ($X^{16} + X^{12} + X^5 + 1$)
	Number of occupied stations	Remote device station. 1 station is occupied.
	Remote input / output	RX : 32 points RY : 32 points
	Remote register	RWr : 4 points RWw : 4 points
	Maximum transmission distance	1200m (156kbps) / 900m (625kbps) / 400m (2.5Mbps) / 160m (5Mbps) / 100m (10Mbps)
	Number of connections	① $\{ (1 \times a) + (2 \times b) + (3 \times c) + (4 \times d) \} \leq 64$ stations a : Number of units occupied by 1 station b : Number of units occupied by 2 stations c : Number of units occupied by 3 stations d : Number of units occupied by 4 stations ② $\{ (16 \times A) + (54 \times B) + (88 \times C) \} \leq 2304$ A : Number of connected of remote I/O stations ... MAX. 64 units B : Remote device station Max. 42 units C : Number of connected of local stations and intelligent device stations MAX. 26 units
	Address setting	1 to 64
	Connection cable	Ver. 1.10 compatible CC-Link dedicated cable
	Terminating resistor	110Ω Internal termination resistor is connected when the terminal is short-circuited

Item	Specification / Performance	
Insulation resistance	Between power supply, input, control output and ground (communication output is grounded).	Above 50MΩ at 500V DC.
	Between power supply and input and control output.	
	Between control outputs.	
Voltage test (Power frequency withstand voltage)	Between power supply, input, control output and ground (communication output is grounded).	2210V AC (50/60Hz) 5 seconds
	Between power supply and input and control output.	1390V AC (50/60Hz) 5 seconds
	Between control outputs	
Impulse voltage test (Impulse withstand voltage)	Between power supply, input, control output and ground (communication output is grounded).	5kV 1.2/50μs
	Between power supply and input, control output, communication output.	
	Between input and power supply, control output, communication output.	
	Between control output and power supply, input, communication output	
Damped oscillatory wave immunity test IEC 61000-4-12	Peak voltage : 2.5kV, frequency : 1MHz ±10%, Add 3 times for 30 seconds. Malfunction and communication stop must not occur. • Power supply (Normal / Common)	
Square impulse immunity test B-402 Standards	Add noise (1μs, 100 ns width) repeatedly for 5 minutes. Malfunction and communication stop must not occur. • Power supply (Normal / Common) 2.0kV or more • Input (BI) (Common) 1.5kV or more • Control output (Common) 1.5kV or more • Communication output (Induction) 1.0kV or more	
Radio wave immunity test	• There should be no malfunction or communication stop when the radio waves of the rated output 5W transceiver (150MHz band, 400MHz band) are contacted and intermittently irradiated. • There should be no malfunction or communication stop when the radio waves of the mobile phone or wireless LAN (2.4GHz, 5GHz) are contacted and intermittently irradiated.	
Electrostatic discharge immunity test IEC 61000-4-2	Conducted under normal usage conditions. No malfunction or communication stop at air discharge 15kV, contact discharge 8kV. Capacitor charge method.	
Vibration	IEC 60068-2-6 : 2007 Frequency range : 10 to 55 Hz, Single amplitude : 0.15 mm, Sweep cycle : 10 times	
Shock	IEC 60068-2-27 : 2008 Peak acceleration : 500 m/s ²	
Power outage guarantee	Each set value is data-saved by non-volatilized memory.	
Overload capacity	1.5 times 10 seconds, 1.2 times continuation (AC power supply), 1.3 times continuation (DC power supply) of rated voltage.	
Construction	110×110×103.5mm [W×H×D] , Body diameter : 99mmφ , With terminal cover	
Material	Case : ABS (V-0) , Terminal block : PBT , Terminal cover: Polycarbonate	
color	Black (Munsell N1.5)	
Protection rating	IP40	
Terminal screw	M4×15 , M3×14	
Mass	Approx. 500g	
Operating temperature and humidity limits	-10 to 55℃ , 5 to 95% RH (Non condensing)	
Storage temperature limits	-25 to 70℃	

12 Trouble shooting

Trouble	Probable cause	Treatment method
LED does not lights.	No power supply is applied to terminals 1-2	Please by applying power supply.
	Fault / operation input is not applied	LED does not light when fault and status inputs are not applied. By pressing the LAMP TEST switch, lighting can be confirmed.
	ON answer, OFF answer input is not applied	LED does not light when ON answer and OFF answer inputs are not applied. By pressing the LAMP TEST switch, lighting can be confirmed.
Even if LAMP RESET switch is pressed (external operation input is applied), LED does not turn off.	Fault / operation input is applied	LED cannot be turned off when a fault / operation input is applied.
OLED display does not lights.	Auto display off function (Display off without operation for 10 minutes)	The OLED display is lighted by entering the setting mode or the test mode.
ON control is not possible	ON Answer input is applied	During ON answer input (ON LED lights), ON control cannot be performed by the main unit switch.
	Operation lock input is applied	ON control cannot be performed while operation is locked.
	Remote / Local status does not match	Remote : Operate using CC-Link communication. Local : Operate using switch on the main unit.
	Warning is display	ON control cannot be performed while warning is displayed.
OFF control is not possible	OFF Answer input is applied	During OFF answer input (OFF LED lights), ON control cannot be performed by the main unit switch.
	Operation lock input is applied	ON control cannot be performed while operation is locked.
	Remote / Local status does not match	Remote : Operate using CC-Link communication. Local : Operate using switch on the main unit.
	Warning is display	ON control cannot be performed while warning is displayed.
Data link error, Communication error	Communication settings (Address, Bit rate) are not correct	Check the setting
	Communication cable is disconnected or not connected correctly (polarity, etc.)	Check the communication cable.
	Ver.1.10 compatible communication cable is not used	
	Incorrect communication procedure	Check the communication specification.
	Communication is stopped	Please perform the CPU reset.
	Termination resistor is not connected	Make sure that a terminating resistor is connected to the terminating device.

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